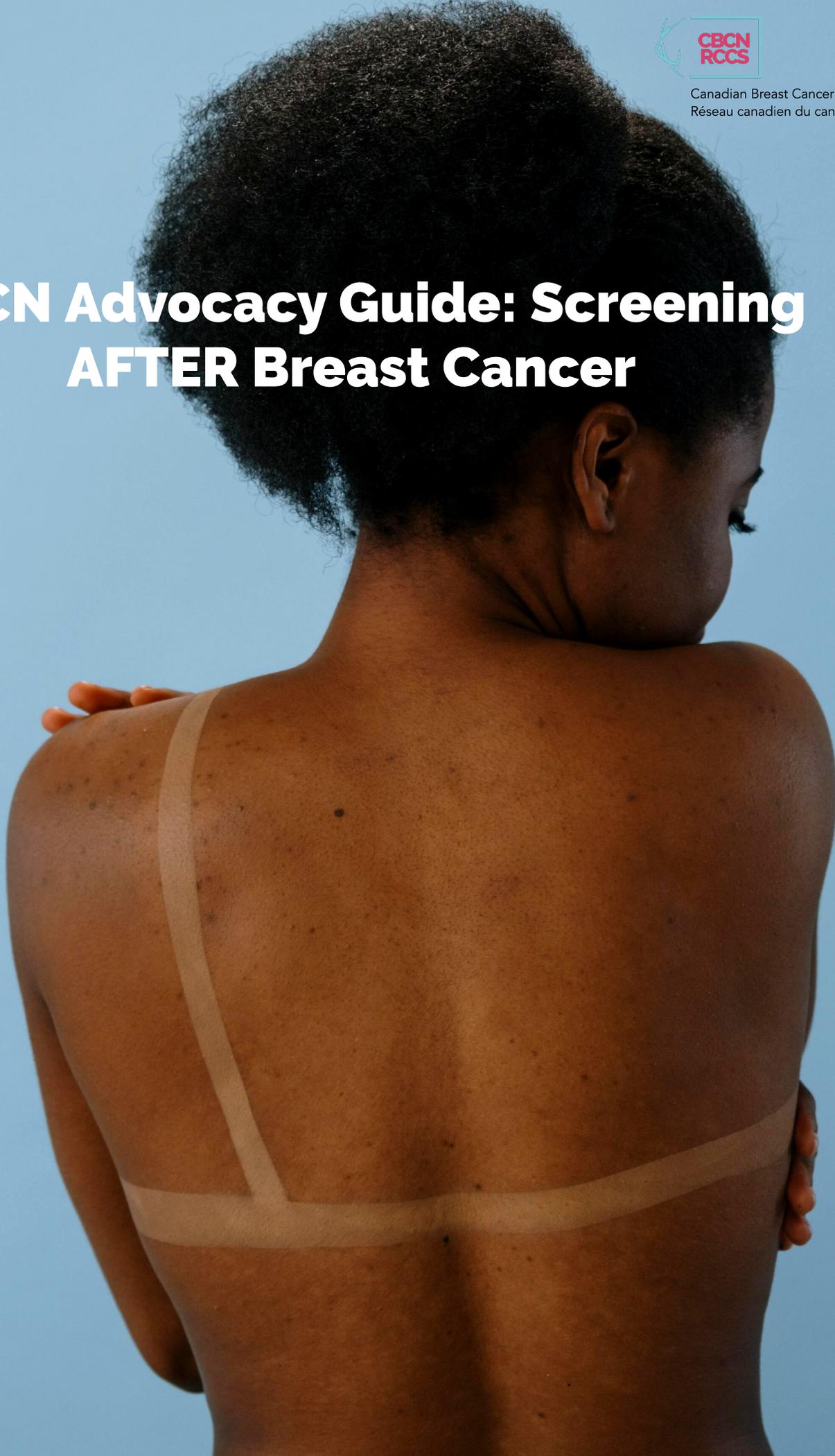




Canadian Breast Cancer Network
Réseau canadien du cancer du sein

CBCN Advocacy Guide: Screening AFTER Breast Cancer



When you have completed breast cancer treatment or surgery, you will be required to see your doctor for follow-up care. Follow-up care is done to make sure that the breast cancer treatment and therapies you received have worked and to detect new or recurrent cancer. New or recurrent breast cancer may occur at a rate of about 1% per year and depends on many factors, including your age, treatment, and type of breast cancer.

While various assessments and discussions can happen during follow-up care, this guide focuses specifically on the various breast imaging technologies that may be used. It is important to distinguish between routine imaging to look for recurrent or a new cancer in a woman who has no symptoms of breast cancer: that is called **surveillance imaging** and is generally done every year after a diagnosis of breast cancer. On the other hand, some new, recurrent, or metastasized cancers may present with symptoms. For these cases, a **diagnostic assessment**, usually involving a diagnostic mammogram, breast ultrasound, and/or other targeted imaging, is required.

Below, we discuss the most common breast imaging technologies that may be used on individuals who were diagnosed with breast cancer and have completed their treatments. You can learn more about screening after breast cancer [here](#) and [here](#). This should serve as a general guide as not all breast imaging technologies may be available or appropriate. In addition to this, the COVID-19 pandemic may alter the standard procedure that would have taken place in the absence of the pandemic.

Mammography

A mammography (or mammogram) allows doctors to check for changes in breast tissue using a low-dose x-ray. The mammography machine consists of 2 plates that flatten the breast between two plates to spread the breast tissue apart, allowing for a better-quality picture and low radiation. Once in the machine, images of your breast are taken from top to bottom and side to side. The process of a mammography can be slightly uncomfortable, but the process is fairly quick, about 20 minutes. When a mammography is done on someone who has previously been diagnosed with breast cancer and who has no symptoms of a new problem in the breast, it is referred to as a **surveillance mammography**.

If you had a lumpectomy, you will get a mammogram on both breasts. If you had a mastectomy, you will receive a mammogram on the unaffected breast, and if there is sufficient breast tissue that remains on the mastectomy side, you may have a mammogram on this side, but it will depend on where you live and the screening centre. If you had a double mastectomy, a mammogram will not be offered as there will be no breast tissue to check and a recurrent cancer will usually be detected by the presence of new breast symptoms.

Digital mammography, also called 2D full-field mammography, is the standard for mammography in Canada. It provides better analysis than older film screen mammography as the produced image can be manipulated for more clarity. It is also a faster procedure that uses 25% less radiation.^[1] A **breast tomosynthesis**, or digital breast tomosynthesis, is a type of 3D mammography. Just as with a 2D mammography, each breast is compressed from two separate angles and pictures are taken using x-rays. However, during a 3D mammography, the machine moves in a small arc around the breast, capturing multiple images. The images are then put together into a set of thin slices, allowing doctors to get a 3D image of the breast tissues that is clearer and more detailed than a 2D mammography. 3D mammograms [have been shown](#) to be helpful in many individuals, from finding more breast cancers to lowering the rate of abnormal recalls from screening.

Annual surveillance mammograms are recommended for individuals who have been diagnosed with breast cancer. This has been shown to help diagnose earlier stage recurrent or new breast cancer, even if the original breast cancer was not detected on mammography. Some patients also benefit from **supplemental screening**: screening in addition to annual mammography. For example, high-risk individuals, including those who carry genetic mutations that increase their risk of breast cancer (e.g. BRCA1 or BRCA2 genes) may require other types of breast imaging technologies. Other women, such as those with [dense breasts](#) who have a lower sensitivity of mammograms detecting breast cancer, may not benefit from mammograms alone. Although a mammogram determines the density of breast tissue and detects about 60% of new or recurrent breast cancer in dense breasts, a mammogram can miss a cancer because it may be hidden by the dense breast tissue. Additionally, breast surgery and radiation can lead to changes in the skin and breast tissues that show up on mammograms and make their results harder to read. This means that for individuals in these populations, a screening breast MRI or breast ultrasound is often needed in addition to annual surveillance mammography. Supplemental imaging is generally only offered to women up to age 69 years. After age 69, the mammogram is generally found to be sensitive enough to detect breast cancer, and because of this, the need for additional screening

tests is not offered.

While a **diagnostic mammography** is similar to a screening mammography, there are some differences. During a diagnostic mammography, more pictures may be taken and there is a focus on areas of concern. Generally, a diagnostic ultrasound will also be done if there is a focal abnormality or symptom such as a lump in the breast.

Ultrasound

An ultrasound uses high-frequency sound waves to create high-resolution images. Ultrasounds are particularly useful in characterizing a breast mass as it can distinguish a mass that is filled with fluid, which is typically a benign cyst, from a suspicious mass. It can also guide a breast biopsy, which diagnoses breast cancer, with almost 100% accuracy. Because an ultrasound does not rely on density differences to identify cancers, it is particularly helpful for women with dense breasts. An ultrasound usually takes around 20 to 30 minutes^[2], is well-tolerated, and is done with you lying on a table, with the arm raised on the side of the breast being imaged to help with the imaging. A water-based gel is then rubbed on the skin of the breast and a transducer is moved over the skin where the gel was rubbed. The gel is used to both lubricate the skin and to help the transducer send out the sound waves. A computer in the ultrasound analyzes the signals and displays the image on the screen. The images are seen by the technologist doing the examination and then interpreted by the radiologist, the medical doctor who supervises the ultrasound and specializes in imaging.

Automated Breast Ultrasounds (ABUS) are offered at some centres. An ABUS uses a larger transducer with a second handheld ultrasound to produce many more images than a standard ultrasound – the entire breast is pictured with an ABUS. This may be offered as an additional breast screening technique for women with dense breasts. If ABUS identifies an abnormality, a diagnostic breast ultrasound will be required to characterize the finding.

Magnetic Resonance Imaging (MRI)

Magnetic resonance imaging (MRI) produces cross-section images of inside your body using strong magnets and radio waves. An MRI scanner, a long cylinder that houses a very strong magnet, takes sliced views of soft tissue from various angles. Some centres have MRI scanners specifically for breast cancer which have a dedicated breast coil to create images of the breast. Breast MRIs are helpful in cases where mammography or ultrasound results are unclear or are difficult to read^[3] and have been shown to be a highly effective tool in helping to screen women who have a personal history of breast cancer and dense breast tissue. An MRI, in combination with a mammogram, is most ideal for individuals who are high-risk or those with the most dense breast tissue.^[4]

When you are inside the machine, which is very narrow, you must stay still and may need to hold your breath during certain times of the test so that the images can be created. Some centres have MRI machines that have a less narrow opening that make getting an MRI much easier and less restrictive. While these machines are less restrictive, the images that they produce may not be as clear as those produced from standard MRI machines.

MRIs are painless, and while creating each of the images may take just a few minutes, the entire test can take between 30 and 45 minutes. Some centers now use a faster breast MRI technique, called an **abbreviated** or **shortened MRI**, that takes 12 minutes to perform, and which has been shown to be very helpful and equivalent to the longer protocols. When getting an MRI done, you lie face down on a table that slides into a tube. Using a powerful magnetic force and radiofrequency waves, the machine picks up signals from the centre of hydrogen atoms in your body and these signals are then transformed into a black and white picture. Breast MRIs require a contrast material called gadolinium, placed into the body through a vein, to show any abnormal areas in the breast tissue. The intravenous gadolinium is injected during the examination and may cause you to feel warm while it is being injected. The risk of allergy to gadolinium is very rare, and normally the gadolinium is washed out of your body through the kidneys. Women with poor kidney function need to be tested first to determine if they can have intravenous gadolinium.

[1] [Digital Mammograms: A Clearer Picture](#). WebMD. Accessed April 5, 2022.

[2] [Ultrasound for Cancer](#). American Cancer Society. Accessed April 5, 2022.

[3] [Mammograms After Breast Cancer Surgery](#). American Cancer Society. Accessed April 5, 2022.

[4] [What is breast magnetic resonance imaging \(MRI\)?](#). Komen. Accessed April 5, 2022.

Advocating to Access the Appropriate Screening

While each province and territory have their own standard procedure of how often and how long follow-up care is required, these set times may not be ideal for everyone. Those who are at high-risk due to having dense breast, family history, the type of breast cancer they had, or those with BRCA1 or BRCA2 gene mutations may require more regular and longer follow-up care. In addition to this, they may require additional types of breast imaging than what is regularly offered. For example, individuals with dense breast tissue may require the addition of an ultrasound or breast MRI. **Finding out what is recommended is a good start.** If you find yourself needing access to a certain breast imaging technique for whatever reason, there are a few ways to advocate for access.

Contacting Your Provincial MPP/MLA

Depending on where you live, you can reach out to your MPP (Member of Provincial Parliament) or MLA (Member of Legislative Assembly) and detail your situation, whether it is that a certain test is not covered in your province/territory or that you do not fit the eligibility criteria. This is also a way to explore whether **policy changes need to be made** to ensure that other breast cancer patients who may need access to breast imaging techniques that are not the standard can do so. You can **find the contact information** for your elected official using your home address. In your correspondence to them, be sure to include what the importance of accessing the particular breast imaging technique would mean to you and other breast cancer patients.

Contact Your Ministry of Health

The Ministry of Health where you live is responsible for setting healthcare policies in your province. You can reach out to them to voice your concerns regarding access to the various breast imaging techniques. You can find the contact information of the Ministry of Health for where you live **here**. You can also contact the Minister of Health of Canada and voice your concerns. In your correspondence, be sure to include what the importance of accessing the particular breast imaging technique would mean to you and other breast cancer patients. The contact information for the Minister of Health of Canada is:

Minister of Health
House of Commons
Ottawa, Ontario K1A 0A6
hcmminister.ministresc@canada.ca

Contact Your Private Insurance Company

If you have private insurance, then you may be able to have your testing covered if you are able to find a **private clinic** that offers the breast imaging technology that you are interested in. The first step would be to check what your current coverage is, or to call them directly to see if it can be covered. You can find a list of questions to ask your private insurance company regarding coverage as well as questions to ask if testing is not covered **here**. If you end up in a situation where your insurance does not cover the testing that you need, you can take **these steps** to appeal.

Pay Out-of-Pocket

If you don't wish to contact a government official, don't have private insurance, or if your private insurance company is unable to cover the test that you require, the option to pay out-of-pocket is available. A great place to start is **FindPrivateClinics.ca** which can help you to find various private clinics across Canada by the type of medical service that you require depending on where you live.